

The Object-Oriented Thought Process

Chapter 04

The Anatomy of a Class

BỞI HCMUT-CNCP

The Name of the Class

The name of the class is important for several reasons.

- To identify the class itself.
- The name must be descriptive.
- The choice of a name is important because it provides information about what the class does and how it interacts within larger systems.

Comments

Regardless of the syntax of the comments used, comments are vital to understanding the function of a class.

- While comments are vital to the documentation and maintenance of code, it is important not to over-comment.

Attributes

Attributes represent the state of the object because they store the information about the object.

- In many designs all attributes are private.
- Keeping the interface design as minimal as possible.
- The only way to access these attributes is through the method interfaces provided.

Methods

Methods represent the behavior of the object because they provide the functionality.

- Methods are defined by their signature and are used to invoke certain behaviors.
- One of the uses of methods is as accessor methods.

Accessor Methods

Controlled access to attributes is provided by methods.

- These methods are called *accessors*.
- Sometimes accessors are referred to as getters and setters.

```
public void setName(String iName) {  
    name = iName;  
}  
public String getName() {  
    return name;  
}
```

Public Methods

Both the constructors and the accessor methods are declared as public and are part of the public interface.

- Other methods can be part of the public interface as well.

```
public void giveDestination ()  
{  
}
```

Private Methods

It is common for methods in a class to be hidden from other classes. These methods are declared as private:

```
private void turnRight(){  
}  
private void turnLeft() {  
}
```